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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,116	10/17/2003	Fumito Nariyuki	FS-F03210-01	7360
37398	7590	06/16/2006	EXAMINER	
TAIYO CORPORATION			CHEA, THORL	
401 HOLLAND LANE				
#407			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			1752	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/687,116	Applicant(s) NARIYUKI, FUMITO	
	Examiner Thorl Chea	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the second office action responsive to the communication on April 8, 2005.

Claims 15-29 are pending in this instant application.

2. The objection of the drawing set forth in the previous action is withdrawn in view of the applicants' argument set forth in the previous office action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-16, 18, 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of EP 1096310 A2 (EP'310), Okada et al (US Patent No. 5,952,167), Uytterhoven et al (US Patent No. 6,143,488), and Siga et al (4,332,889) further in view of Whitcomb (US Patent No. 6,472,131 B1).

EP'310 discloses a method of developing a photothermographic material comprising a step of imagewise exposing a thermally developing wherein the temperature of the development is within 80 °C to 250 °C and the development time is within 10 to 180 second. The material contains silver halide, non-photosensitive organic silver salt, a reducing, binder and a halogen containing compound; wherein the silver halide that can be used is not particularly limit as for halogen composition, and silver chloride, silver chlorobromide, silver bromide, silver bromoiodide and silver chlorobromoiodide may be used. Silver halide can be spectrally sensitized within a desired wavelength depending the characteristics of the light source to be

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used in the exposure. The material contains a hydrogen bonding, bisphenol reducing agent and development accelerator. See the process on page 53, [0211] to [0215]; silver halide on page 35, [0075]; reducing agent on pages 6-11; hydrogen bonding compounds on page 20-34; development accelerator on page 36, [0082], organic polyhalogenated compound on pages 59-60, [0241] to [0243]; the grain size of the photosensitive silver halide is preferably small in order to suppress turbidity after image formation, which is from 0.01 to 0.15 micron on page 36, [0077]; the chemical sensitization on page 37, [0087]; and spectrally sensitize silver halide to appropriate light source on page on page 36, [0083].

Okada et al discloses an organic polyhalogenated compound of formula (I) in column 2. Uytterhohoeven et al discloses a use of silver halide having content at least 80 mole % to provide a photothermographic material with improved post-stability, and the recording process includes the step of using UV light. See abstract and column 11, lines 15-35. Siga et al disclose the use of bromiodide having iodide content from 30/70 to 92/2 to provide a photothermographic material with excellent stability. See abstract and column 6, lines 43-68. Whitcom in column 48, claim 26 discloses a process for forming an image using photothermographic material by A) imagewise exposing the photothermographic element to imaging radiation to form a latent image, and B) simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image.

The additives contained in the claimed material have been conventionally known in the art such as the silver halide composition and the polyhalogenate compound, and the simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image is taught in Whitcom. Therefore, it would have been obvious to the worker

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of ordinary skill in the art at the time the invention was made to simultaneously or sequentially, heat said exposed photothermographic material to develop said latent image into a visible image of the material obtained by the combination of EP 1096310 A2 (EP'310), Okada et al (US Patent No. 5,952,167) Uytterhoven et al (US Patent No. 6,143,488) and Siga et al (4,332,889), and thereby provide a process as claimed.

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over combination of EP 1096310 A2 (EP'310), Okada et al (US Patent No. 5,952,167), Uytterhoven et al (US Patent No. 6,143,488) and Siga et al (4,332,889) further in view of Whitcomb (US Patent No. 6,472,131 B1) as applied to claims 14-16, 18, 21-29 above, and further in view of Farid et al (US Patent No. 5,747,236) or Asanuma et al (US Patent No. 6,686,140). The applied prior art disclosed in the paragraph 4 above fail to disclose the compound that can be one-electron-oxidized to provide a one-electron oxidation product which releases one or more electrons. The compounds however have been known in Asanuma et al in column 6, Type 1 to Type 5, and Farid in the abstract. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the known compound taught in either Farid et al or Asanuma to provide the material of Uytterhoeven et al with high photographic speed and low fog, and thereby provide an invention as claimed.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over combination of EP 1096310 A2 (EP'310), Okada et al (US Patent No. 5,952,167), Uytterhoven et al (US Patent No. 6,143,488) and Siga et al (4,332,889) and further in view of Whitcomb (US Patent No. 6,472,131 B1) as applied to claims 15-16, 18, 21-29 above, and further in view of Hirabayashi (US 2002/0123016A1). The applied prior art in the paragraph 4 fails to disclose to

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exposed the photographic material with a specific wavelength of 350 nm to 450 nm, but it has been known in Hirabayashi to use light source having emission wavelength of 350 nm to 450 nm to expose the photographic material that results in image superiority. See abstract and page 1, [0005]. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to expose the material obtained by the combination of the applied prior art above with use light source having emission wavelength of 350 nm to 450 nm to expose the photographic material that results in image superiority.

7. Claims 15-29 are rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/191,485 (US 2003/0118953) in view of Whitcomb (US Patent No. 6,472,131 B1)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the

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reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

See the composition of the photothermographic material and the process of forming an image on pages 47-49 wherein the material contains polyhalogenate compound, silver halide having iodide content of 40 mole % to 100 mole% and using light exposure of 390 nm to 430 nm and heat developing at temperature of 110 °C to 130 °C. The difference between the invention as claimed and that taught in the applied prior art is the imagewise exposing and thermal developing comprising imagewise exposing a part of the sheet and simultaneously developing a part of the sheet that has been imagewise exposed presented in the claim 18. Whitcomb in column 48, claim 26 discloses a process for forming an image using photothermographic material by A) imagewise exposing the photothermographic element to imaging radiation to form a latent image, and B) simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to simultaneously or sequentially heating the imagewise exposure of the material of the material disclosed in the copending application serial no. 10/191,485 (US 2003/0118953), and thereby provide a process as claimed.

8. Claims 15-29 are rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/191,485 (US 2003/0118953) in view of Witcomb (US Patent No. 6,472,131 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C.

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102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

See the composition of the photothermographic material and the process of forming an image on pages 47-49 wherein the material contains polyhalogenate compound, silver halide having iodide content of 40 mole % to 100 mole % and using light exposure of 390 nm to 430 nm and heat developing at temperature of 110 °C to 130 °C. Whitcomb in column 48, claim 26 discloses a process for forming an image using photothermographic material by A) imagewise exposing the photothermographic element to imaging radiation to form a latent image, and B) simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to simultaneously or sequentially heating the imagewise exposure of the material of the material disclosed over copending Application No. 10/191,485 (US 2003/0118953), and thereby provide a process as claimed.

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9. Claims 15-29 are rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/403,006 (US 2003/0207216A1) in view of Witcomb (US Patent No. 6,472,131 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

See pages 55-57 and page 33, [0394], compound of general formula (H). The copending application discloses similar material and process, except failing to disclose of step wherein the imagewise exposing and thermal developing comprising imagewise exposing a part of the sheet and simultaneously developing a part of the sheet that has been imagewise exposed presented in the claim 18. Whitcomb in column 48, claim 26 discloses a process for forming an image using photothermographic material by A) imagewise exposing the photothermographic element to

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imaging radiation to form a latent image, and B) simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to simultaneously or sequentially heating the imagewise exposure of the material of the material disclosed over copending Application No. 10/403,006 (US 2003/0207216A1), and thereby provide a process as claimed.

10. Claims 15-29 are rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/285,644 (US 2003/0232288 A1) in view of Witcomb (US Patent No. 6,472,131 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

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See pages 192-195, claims 1-55 and the document as a whole which discloses the claimed invention, except failing to disclose the imagewise exposing and thermal developing comprising imagewise exposing a part of the sheet and simultaneously developing a part of the sheet that has been imagewise exposed presented in the claim 18. Whitcomb in column 48, claim 26 discloses a process for forming an image using photothermographic material by A) imagewise exposing the photothermographic element to imaging radiation to form a latent image, and B) simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to simultaneously or sequentially heating the imagewise exposure of the material of the material disclosed over copending Application No. 10/285,644 (US 2003/0232288 A1) and thereby provide a process as claimed.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 15-29 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-15 of copending Application No. 10/191,485 in view of Okada et al (US Patent No. 5,952,167) and Witcomb (US Patent No.

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6,472,131 B1) . The difference between the claimed process is use of the organic polyhalogenate compound and the imagewise exposing and thermal developing comprising imagewise exposing a part of the sheet and simultaneously developing a part of the sheet that has been imagewise exposed presented in the claim 18. The polyhalogenated compound has been known as antifoggant for photothermographic material disclosed in Okada et al in the abstract, and Whitcomb in column 48, claim 26 discloses a process for forming an image using photothermographic material by A) imagewise exposing the photothermographic element to imaging radiation to form a latent image, and B) simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to simultaneously or sequentially heating the imagewise exposure in the process claimed in the copending application 10/191,485, and thereby provide a method as claimed.

This is a provisional obviousness-type double patenting rejection.

12. Claims 15-29 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15-16 of copending Application No. 10/403,006 in view of Okada et al (US Patent No. 5,952,167) and Witcomb (US Patent No. 6,472,131 B1). The difference between the claimed process is use of the organic polyhalogenate compound and the imagewise exposing and thermal developing comprising imagewise exposing a part of the sheet and simultaneously developing a part of the sheet that has been imagewise exposed presented in the claim 18. The polyhalogenated compound has been known as antifoggant for photothermographic material disclosed in Okada et al in the abstract, and

Whitcomb in column 48, claim 26 discloses a process for forming an image using photothermographic material by A) imagewise exposing the photothermographic element to imaging radiation to form a latent image, and B) simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to simultaneously or sequentially heating the imagewise exposure in the process claimed in the copending application 10/403,006, and thereby provide a method as claimed.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

13. Applicant's arguments filed November 28, 2005 have been fully considered but they are not persuasive because of new ground of rejection above. In the pre-appeal conference request, the applicants argued that "regarding the relationship between exposure and development, the cited references disclose only that the development occurs after exposure. More specifically, none of the references discusses the period of time between the exposure and development, let alone simultaneous exposure and development". The argument is not persuasive in view of Witcomb et al which discloses a process for forming an image using photothermographic material by A) imagewise exposing the photothermographic element to imaging radiation to form a latent image, and B) simultaneously or sequentially, heating said exposed photothermographic material to develop said latent image into a visible image. The sequence of time between the imagewise exposure and heat developing is not critical such as disclosed in Witcomb et al.


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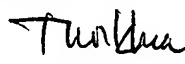
Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea 
June 16, 2005


Thorl Chea
Primary Examiner
Art Unit 1752